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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/207,361	12/08/1998	FRIEDHELM ZUCKER	RCA-89.291	6681
24498	7590	07/17/2006	EXAMINER	
THOMSON LICENSING INC. PATENT OPERATIONS PO BOX 5312 PRINCETON, NJ 08543-5312			CHU, KIM KWOK	
			ART UNIT	PAPER NUMBER
			2627	

DATE MAILED: 07/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/207,361	Applicant(s) ZUCKER, FRIEDHELM	
	Examiner Kim-Kwok CHU	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment & RCE filed on May 8, 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Remarks

1. Applicant's Remarks filed on May 8, 2006 have been fully considered.

Applicant does not agree that an initializing magnet is an erasing means (page 6 of the Remarks, line 7). Accordingly, in the present cited prior art of Takokoro as illustrated in Fig. 3B, the initializing step will rearrange the magnetization direction of a ferro-magnetic layer 4 in a magneto-optical recording medium 1. In other words, the alignment of the ferro-magnetic layer 4 is erased and initialized by the magnet 8. Similarly, Applicant's erasing means is an initializing magnet similar to the prior art of Takokoro's magnet 8. For example, Applicant discloses that the erasing magnet LM is used to initialize the magneto-optical recording medium (page 6 of the specification, lines 34 and 35). Although Applicant does not specify which layer in the recording medium is erased and initialized, Applicant uses the magnet LM for both erasing and initializing is same as the present cited prior art of Takokoro's magnet 8.

Claim Rejections - 35 USC § 112

2. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) in claim 10, Applicant claims the feature of a second optical scanning device. However, there is no claiming of "a first optical scanning device" and its feature/structure related to other means in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless --
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

4. Claims 1-3 and 6-9 are rejected under 35 U.S.C. § 102(b) as being anticipated by Takokoro et al. (U.S. Patent 5,025,430).

Takokoro teaches a magneto-optical recording system having all of the elements and means as recited in claims 1-3 and 6-9. For example, Takokoro teaches the following:

(a) as in claim 1, an information erasing means 8 (Fig.

3A; initializing magnet 8 aligns layer 4 in one single direction);

(b) as in claim 1, in case of recording information, an information writing device 21 (Fig. 3A);

(c) as in claim 1, the writing device (laser source in 21) is formed from a writing magnet 9 and an optical scanning device 21 (Figs. 3A and 3B);

(d) as in claim 1, the writing device (laser source in 21) overwrites information or data recorded on a magneto-optical medium 1 (Fig. 3B; column 2, lines 34-68);

(e) as in claim 1, the erasing means 8 is formed by an erasing magnet 8 having a magnetic field H_{ini} which is directed opposite to the magnet 9 of the writing device (laser source in 21) (Fig. 3B; initialized magnetic field H_{init} is opposite to the recording magnetic fields);

(f) as in claim 1, the information erasing means 8 is connected with the optical scanning device 21 to one of erase, and erase and initialize the magneto-optical recording medium (Fig. 3B; magnetic field H_{ini} initializes/erases layer 4 in the form of aligning data in the same direction but no to overwrite it);

(g) as in claim 1, the erasing means 8 initialize the magneto-optical recording medium 1 only in a region upstream (disc rotating direction) of a track to be written directly

before the recording of new information or data (Figs. 3A and 3B; erasing means 8 initialize a track before data is overwritten);

(h) as in claim 1, the erasing means 8 has a field strength Hini sufficient to initialize the magneto-optical recording medium 1 without the assistance of a laser (Fig. 3B; initialization does not require heat);

(i) as in claim 2, the erasing magnet 8 has a mechanical connection to the writing device (Figs. 3A and 3B; inherent feature because the erasing magnet 8 and the writing device 21 are all supported by a mechanical connection, for example, a head assembly);

(j) as in claim 3, a mechanical connection such as a join to connect erasing means 8 and writing device (laser source in 21) (Fig. 3A; inherent feature because the means 21 and 8 are mechanically joined together within a head assembly);

(k) as in claim 6, the erasing magnet 8 is a permanent magnet (Fig. 3A);

(l) as in claim 7, the erasing magnet 8 is connected to a means (coils) for deactivating the erasing magnet 8 (Figs. 3A and 3B; magnetic field is activated or deactivated by current through a coil in electromagnet 8);

(m) as in claim 8, the erasing magnet 8 is connected to a means for deactivating the erasing magnet 8 and the means for

deactivating the erasing magnet 8 is an electromagnet (Figs. 3A and 3B; ; initializing magnet are electromagnetic means which generate erasing field when activated); and

(n) as in claim 9, the erasing magnet 8 is an electromagnet (Figs. 3A and 3B; ; initializing magnet are electromagnetic means which generate erasing field when activated).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takokoro et al. (U.S. Patent 5,025,430) in view of Kamioka (U.S. Patent 5,493,548).

Takokoro teaches a magneto-optical recording and reproducing device very similar to that of the instant invention. For example, Takokoro teaches the following:

(a) as in claim 10, an information erasing means 8 (Fig. 3A; initializing magnet 8 aligns layer 4 in one single direction);

(b) as in claim 10, in case of recording information, an information writing device 21 (Fig. 3A);

(c) as in claim 10, the writing device (laser source in 21) is formed from a writing magnet 9 and an optical scanning device 21 (Figs. 3A and 3B);

(d) as in claim 10, the writing device (laser source in 21) overwrites information or data recorded on a magneto-

optical medium 1 (Fig. 3B; column 2, lines 34-68);

(e) as in claim 10, an erasing magnet 8 having a magnetic field Hini which is directed opposite to the magnet 9 of the writing device (laser source in 21) (Fig. 3B; initialized magnetic field Hini is opposite to the recording magnetic fields);

(f) as in claim 10, a first optical scanning devices 21 for recording (Figs. 3A and 3B);

(g) as in claim 10, the information erasing means 8 is connected with the optical scanning device 21 to one of erase, and erase and initialize the magneto-optical recording medium (Fig. 3B; magnetic field Hini initializes/erases layer 4 in the form of aligning data in the same direction but no to overwrite it); and

(h) as in claim 10, the erasing means 8 initialize the magneto-optical recording medium 1 only in a region upstream (disc rotating direction) of a track to be written directly before the recording of new information or data (Figs. 3A and 3B; erasing means 8 initialize a track before data is overwritten).

However, Takokoro does not teach the following:

(a) a second optical scanning device for reproducing data; and

(b) the two optical scanning devices are for

simultaneously recording and reproducing data.

Kamioka teaches a magneto-optical recording and reproducing device having two optical scanning devices for simultaneously recording and reproducing data (Fig. 1; column 9, lines 3-20).

A plurality of scanning devices (read/write head) can be used to read and write information/data on an optical recording medium at the same time so that the read/write operations can be independent to each other. For example, Kamioka uses one read/write head for reading information while another head for writing data on an optical recording medium.

When a single read/write head such as Takokoro's would like to perform read and write information/data simultaneously on a magneto-optical recording medium, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace Takokoro's single read/write head with Kamioka's multiple optical scanning (read/write head) devices so that simultaneously recording and reproducing information/data on different tracks can be realized.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Haba (5,367,508) is pertinent because Haba teaches an erasing magnetic means for initializes a magneto-optical recording medium without the assistance of a laser.

Arnett et al. (5,602,806) is pertinent because Arnett teaches an erasing magnetic means for initializes a magneto-optical recording medium without the assistance of a laser.

8. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kim CHU whose telephone number is (571) 272-7585 between 9:30 am to 6:00 pm, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch, can be reached on (57) 272-7589.

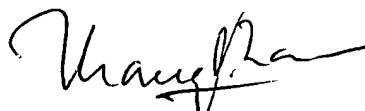
The fax number is:

(571) 273-8300 (for formal communications intended for entry. Or:

(571) 273-7585, (for informal or draft communications, please label "PROPOSED" or "DRAFT").

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished application is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

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THANG V. TRAN
PRIMARY EXAMINER

Kim-Kwok CHU

ke 7/12/06
Examiner AU2627
July 12, 2006

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